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TITLE

Hydrocyanation of Pentenenitriles and/or 2-Methyl-3-Butenenitrile using Promoters Obtained from the Chlorination of Titanium-rich Ores

ABSTRACT

Process for hydrocyanating a substrate selected from 2-, 3-, or 4-pentenenitrile and/or 2-methyl-3-butenenitrile or mixtures thereof by contacting the substrate with HCN in the presence of a zero-valent nickel catalyst and a promoter that is obtained as a byproduct of titanium ore chlorination.